

IFR ENROUTE LOW ALTITUDE - U.S.

|  | L E G E N D  | )  |
|--|--|--|
| Terminal Procedures Publications or the Do   | AIRPORTS  oved Instrument Approach Procedure and/or R D. FLIPs. Those in BLUE have an Instrument Ap  | proach Procedure and/or RADAR MINIMA   |
| RADAR MINIMA.  |  | Pvt - Private use  |
| LAND   | Requirements-see Directory/Supplement  | Associated city names for public airports are shown above or preceding the airport name. If airport name and city name are   |
| 💠 💠 💠 Civil - Military   | indicates FAR 91 fixed-wing special VFR flight is prohibited 3. [C] or [D] following the airport name  | the same, only the airport name is shown.<br>City names for military and private airports<br>are not shown. The airport identifier in  |
|  | Cor D following the airport name indicates Class C or Class D Airspace  Airport Ident CITY   | parentheses follows the airport name.  Part-time or established by   |
| shown o  | AO Location Indicator Airport Nar<br>outside contiguous U.S. (APT) (ICAO)  | NOTAM. See Airport/Facility Directory for times of operation.  |
| SEA<br>  | Airport (A) *109.  | Longest runway length to   |
|  | Automatic Terminal Part-time Fr<br>Information Service Lighting Cap  | as the dividing point (add 00)   |
|  | L Lighting available  ① Pilot Controlled Lighting  | No lighting available     At private facilities - indicates no   |
| NAV  | ★ Part-time or on request  /AIDS AND COMMUNICATION BO  |  |
| NAVAIDS VHF/UHF Data is depicted in BLACK  | COMMUNICATION NAME (T)   | ATION BOXES 000.0  |
| LF/MF Data is depicted in BROWN  COMPASS ROSES   | 000.0 IDT 000(Y) ≌··   | NAME<br>000.0 IDT 000 <b>∷</b> ··  |
| Oriented to Magnetic North of NAVAID which   | VOR with TACAN compatible DME Underline indicates No Voice transmitted   | N00°00.00′ W000°00.00′ )  NAME   |
| may not be adjusted to the   | on this frequency. TACAN Channels are without voice but not underlined.  | Freq(s) positioned above thin line NAVAII box is remoted to the NAVAID site. Other   |
| charted isogonic<br>values.<br>Smaller sizes are   | Crosshatch indicates<br>Shutdown status  | freq(s) at the named FSS radio are<br>available, however, altitude and terrain<br>may determine their reception.   |
| used in congested<br>areas.  | (T) Frequency protection usable range at 12,000' AGL - 25NM  | Thin line NAVAID boxes without freq(s) and FSS radio name  |
|  | 12,000' AGL - 25NM  (Y) TACAN must be placed in "Y" mode to receive distance information   | indicates no freq(s) available.  000.0 000.0   |
| VOR VOR/DME TACAN VORTAC   | NAME   | NAME   |
| /  | 000 IDT ∺·· (000.0)<br>000 oo.00′ wooo°00.00′  | 000.0 IDD 000 :::  N00°00.00' W000°00.00'  |
| LF/MF Non-directional<br>Radiobeacon or Marine<br>Radiobeacon with   | TACAN Channel paired with VHF Frequency in parenthesis.  | Shadow NAVAID box indicates NAVAID<br>and Flight Service Station (FSS) have<br>same name   |
| magnetic north indicator   | Automated Weather Broadcast Systems:   | 000.0 000.0 FSS name and   |
| UHF Non-directional  | ASOS/AWOS  HIWAS TWEB  Automated weather, when available, is   | NAME IDT identifier not associate with NAVAID  |
| Radiobeacon  | broadcast on the associated NAVAID frequency.  | Remote Communication Outlet (RCO). FSS radioname and remoted freq  |
| LF/MF Non-directional  | NAME ASOS 000.0 Stand Alone ASOS/AWOS  | are shown.   |
| Radiobeacon/DME  | Part-Time or On- Request * 000 IDT 00(000.0) ::  | SHADOW BOXES indicate Flight Service<br>Stations (FSS). Frequencies 122.2, 255.4<br>and emergency 121.5 and 243.0<br>(Canada-121.5, 126.7 and 243.0) are   |
| /  | LF/MF Non-directional Radiobeacon/DME  | available at many FSSs and are not shown. All other frequencies are shown.   |
| Compass Locator Beacon   | VHF Freq paired with TACAN Channel TACAN FIX DATA  | Certain FSSs provide Airport Advisory<br>Service, see A/FD. Frequencies transmit<br>and receive except those followed by R or  |
| Flight Service Station (FSS), Remote<br>Communications Outlet (RCO) or   | Ident Chan   | R - Receive only<br>T- Transmit only   |
| <ul> <li>Automated Weather Observing Station<br/>(ASOS/AWOS) not associated with a<br/>charted NAVAID or airport</li> </ul>  | Bearing Distance from TACAN  |  |
| chaned typy and all point  |  |  |
| ILS Localizer Course with additional navigation function   |  |  |
|  |  |  |
|  | IC SERVICES AND AIRSPACE INFO<br>E DATA  | DRMATION<br>BOUNDARIES   |
| VHF/UHF Data is depicted in BLACK<br>LF/MF Data is depicted in BROWN   | Changeover Point giving mileage to NAVAIDs   | Air Route Traffic Control<br>Center (ARTCC)  |
| RNAV Data is depicted in BLUE  VOR Airway  | (Not shown at midpoint locations)  | NAME ARTCC Remoted Sites Name with discrete VHF and  |
| LF/MF Airway   | *0000 *0000 Minimum Obstruction  | 5000.0 000.05 UHF frequencies  |
|  | *0000 Clearance Altitude (MOCA)  | Flight Information   |
| Uncontrolled LF/MF Airway  | 0000 0000 Minimum Enroute Altitude (MEA) 0000 GNSS RNAV MEA  | Flight Information Region (FIR)  |
| LF/MF Airway  A0 A0 Oceanic Route  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA   | Region (FIR)  CTA/FIR  Type of Area  Traffic Service  KZAK   |
| LF/MF Airway  Oceanic Route  AO AO ATS Route  Low Alfitude   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or  | Region (FIR)  CTA/FIR Type of Area Traffic Service   |
| AO AO ATS Route  Low Altitude RNAV Route GNSS  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs   | Region (FIR)  Type of Area Traffic Service KZAK UNLID Celling FL 55 Floor ACC  Air Defense Identification  |
| AO AO ATS Route  Low Altitude RNAV Route GNSS required  Substitute Route   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)   | Region (FIR)  Type of Area Traffic Service (KZAK UNLID CEANIC FI. 55 ACC  Air Defense Identification Zone (ADIZ)   |
| LF/MF Airway  Oceanic Route  ATS Route  Low Alfitude RNAV Route GNSS required  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs   | Region (FIR)  Type of Area Traffic Service  VALAND OCEANIC Traffic Service  VALAND OCEANIC Traffic Service  VALAND OCEANIC Traffic Service  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Altitudes (OROCA)   |
| LF/MF Airway  Oceanic Route  AO  ATS Route  Low Allitude RNAV Route GNSS required  Substitute Route Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed  | Region (FIR)  Type of Area Traffic Service KZAK  UNITD Ceiling Floor  Air Defense Identification Zone (ADIZ)  Off Route Obstructic (OROCA)  Example: 12,500 feel   |
| LF/MF Airway  Oceanic Route  ATS Route  Low Altitude RNAV Route GNSS required  Substitute Route Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to allitudes above 6000° to and including 14000° 175K applies to all altitudes  | Region (FIR)  Type of Area Traffic Service (KZAK UNLIT)  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Soft Route Obstructic Clearance Altitudes (OROCA)  Example: 12,500 feet  International Boundary (Not shown when coincident with ARTCC or FIR)   |
| LF/MF Airway  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Substitute Route Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction Route  Direction of Flight   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000° to and including 14000° 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  | Region (FIR)  Type of Area Traffic Service (KZAK UNLIT)  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Soft Route Obstructic Clearance Altitudes (OROCA)  Example: 12,500 feet  International Boundary (Not shown when coincident with ARTCC or FIR)  US/Russia Maritime Boundary  |
| LF/MF Airway  AO AO ATS Route  Low Altitude RNAY Route GNSS required  Oceanic Route  Low Altitude RNAY Route GNSS required  Usu Abpassing temporarily shutdown NAVAIDS. See NOTAMS or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction Route  EVEN Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO Facility Locators  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000° to and including 14000° 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  FIX Compulsory and Non-Compulsory Position Report   | Region (FIR)  Type of Area Traffic Service KZAKU Ceiling Floor  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Altitudes (OROCA)  Example: 12,500 feet  International Boundary  With ARTCC or FIR)  US/Russia Maritime Boundary  Area of Enlargement (contain only data for through flights)  See Area Charts for complete data  |
| LF/MF Airway  Oceanic Route  ATS Route  Low Altitude RNAY Route GNSS required  Substitute Route Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Vo  Preferred Single Direction of Flight Indicator (Canada only)  O00.0 IDT 000  Facility Locators used in formation of Reporting Points   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000° to and including 14000° 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  A FIX Compulsory and  | Region (FIR)  Type of Area Traffic Service KZAKU Ceiling Floor  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Altitudes (OROCA)  Example: 12,500 feet  International Boundary  With ARTCC or FIR)  US/Russia Maritime Boundary  Area of Enlargement (contain only data for through flights)  See Area Charts for complete data  |
| LF/MF Airway  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Company shutdown NAVAIDS  See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction Route  EVEN  Direction of Flight Indicator (Canada only)  Facility Locators used in formation   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000' to and including 1 4000' 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  Fix Compulsory and Non-Compulsory Position Report  | Region (FIR)  Type of Area Traffic Service KZAKU Ceiling Floor  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Altitudes (OROCA)  Example: 12,500 feet  International Boundary (Not shown when coincident with ARTCC or FIR)  VS/Russia Maritime Boundary  Area of Enlargement (contain only data for through flights)  See Area Charts for complete data  Official Time Zone  International Date Line   |
| LF/MF Airway  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction Route  EVEN  Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Facility Locators used in formation of Reporting Points  Radial outbound from  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  I MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MKA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed (MCA)  210K applies to altitudes above 6000° to and including 14000° 175K applies to all altitudes  FIXES/ATC  REPORTING REQUIREMENTS  A Fix Compulsory and Non-Compulsory Position Report  RNAV Waypoint Compulsory and Non-Compulsory Position Report  Denotes DME Fix (Distance same as route mileage)  Denotes DME Fix and Mileage   | Region (FIR)  Type of Area Traffic Service (KZAK)  UNITO Ceiling FL 55  ACC  Air Defense Identification Zone (ADIZ)  Off Route Obstructic (Clearance Altitudes (OROCA)  Example: 12,500 feet  International Boundary (Not shown when coincident with ARTCC or FIR)  WS/Russia Maritime Boundary  Area of Enlargement (contain only data for through flights)  See Area Charts for complete data  Official Time Zone  International Date Line  AIRSPACE INFORMATION  Open area (white) indicates controlled   |
| LF/MF Airway  LF/MF Airway  AO  AO  AO  ATS Route  Low Alfitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Facility Locators used in formation of Reporting Points  AU  OOO  Radical outbound from a VHF/UHF NAVAID  Bearing inbound to an LE/MF NAVAID  Magnetic Reference Bearing, outbound  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000° to and including 14000° 175K applies to all altitudes FIXES/ATC REPORTING REQUIREMENTS  A Fix Compulsory and Non-Compulsory Position Report  Penotes DME Fix (Distance same as route mileage)  Denotes DME Fix and Mileage  Offset arrows indicate facility forming a fix (away from NHF/UHF, toward LF/MF   | Region (FIR)  Type of Area Traffic Service (KZAK)  UNITO Ceiling FL55  ACC  Air Defense Identification Zone (ADIZ)  Off Route Obstructic (Clearance Alfitudes (OROCA)  Example: 12,500 feet  International Boundary (Not shown when coincident with ARTCC or FIR)  US/Russia Maritime Boundary  Area of Enlargement (contain only data for through flights)  See Area Charts for complete data  Official Time Zone  International Date Line  AIRSPACE INFORMATION  Open area (white) indicates controlled airspace (Class E) unless otherwise indicate   |
| LF/MF Airway  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Facility Locators used in formation of Reporting Points  OOO  Radial outbound from a VHF/UHF NAVAID  Magnetic Reference Bearing, outbound from a NAVAID or Fix  Total Mileage between   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Whinimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000' to and including 1 4000' 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  A Fix Compulsory and Non-Compulsory Position Report  Penotes DME Fix (Distance same as route mileage)  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)  Mileage Breakdown or Computer  | Region (FIR)  Type of Area Traffic Service KZAKE UNITO CEANIC Traffic Service KZAKE UNITO Ceiling Floor  Air Defense Identification Zone (ADIZ)  5 Off Route Obstructic Clearance Altitudes (OROCA) Example: 12,500 feet International Boundary (Not shown when coincident with ARTCC or FIR)  VS/Russia Maritime Boundary Area of Enlargement (contain only data for through flights) See Area Charts for complete data Official Time Zone International Date Line AIRSPACE INFORMATION Open area (white) indicates controlled airspace (Class E) unless otherwise indicated (Class E)  |
| LF/MF Airway  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Substitute Route Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction of Flight Indicator (Canada only)  O00.0 IDT O00  Facility Locators used in formation of Reporting Points  O00  Radial outbound from a VHF/UHF NAVAID  Magnetic Reference Bearing, outbound from a NAVAID or Fix   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000° to and including 14000° 175K applies to all altitudes FIXES/ATC REPORTING REQUIREMENTS  A Fix Compulsory and Non-Compulsory Position Report  Penotes DME Fix (Distance same as route mileage)  Denotes DME Fix and Mileage  Offset arrows indicate facility forming a fix (away from NHF/UHF, toward LF/MF   | Region (FIR)  Type of Area Traffic Service (Cashall Cashall Ca |
| LF/MF Airway  LF/MF Airway  AO  AO  AO  ATS Route  Low Alfitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Radial outbound from a VHF/UHF NAVAID  Magnetic Reference Bearing, outbound from a NAVAID or Fix  Total Mileage between Compulsory Fixes and/or NAVAIDS  Mileage between other Fixes, NAVAIDS and/or  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  I MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000' to and including 14000' 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  A Fix Compulsory and Non-Compulsory Position Report  RNAV Waypoint Compulsory and Non-Compulsory Position Report  Denotes DME Fix (Distance same as route mileage)  Denotes DME Fix and Mileage  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)  Mileage Breakdown or Computer X X Navigational Fix (CNF)   | Region (FIR)  Type of Area Traffic Service (Calling FL 55 ACC Traffic Service (ADIZ)  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic (Clearance Alfitudes (OROCA) Example: 12,500 feet International Boundary (Not shown when coincident with ARTCC or FIR)  Area of Enlargement (contain only data for through flights) See Area Charts for complete data  Official Time Zone  International Date Line  AIRSPACE INFORMATION  Open area (white) indicates controlled airspace (Class E) unless otherwise indicate All airspace 14,500' and above is controlled airspace below 14,500' (Class G)  In Canada - Indicate class B Airspace above 12,500'  |
| LF/MF Airway  AO  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Facility Locators used in formation  Of Reporting Points  AUF/UHF NAVAID  Bearing inbound from a VHF/UHF NAVAID  Magnetic Reference Bearing, outbound from a NAVAID or Fix  Total Mileage between Compulsory Fixes and/or NAVAIDS and/or Mileage Breakdown  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  I MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Crossing Altitude (MRA)  Whinimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000' to and including 1 4000' 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  A Fix Compulsory and A Non-Compulsory Position Report  Poenotes DME Fix (Distance same as route mileage)  Denotes DME Fix and Mileage  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)  Mileage Breakdown or Computer X X Navigational Fix (CNF) (no ATC functions)   | Region (FIR)  Type of Area Traffic Service (ADIZ)  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Altitudes (OROCA)  Example: 12,500 feel  International Boundary (Not shown when coincident with ARTCC or FIR)  Area of Enlargement (contain only data for through flights)  See Area Charts for complete data  Official Time Zone  International Date Line  AIRSPACE INFORMATION  Open area (white) indicates controlled airspace (Class E) unless otherwise indicated All airspace 14,500' and above is controlled airspace below 14,500' (Class G)  In Canada - Indicate uncontrolled airspace below 14,500' (Class G)  Oceanic Control Are (CTA)  |
| LF/MF Airway  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  VIO  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Facility Locators used in formation of Reporting Points  Adjusted Total Mileage between Compulsory Fixes and/or NAVAIDS  Mileage between other Fixes, NAVAIDS and/or Mileage Breakdown  EXAMPLE OF   | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  I MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000' to and including 14000' 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  FIXE Compulsory and Non-Compulsory Position Report  Non-Compulsory Position Report  Poenotes DME Fix (Distance same as route mileage)  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)  Mileage Breakdown or Computer X X Navigational Fix (CNF) (no ATC functions)  | Region (FIR)  Type of Area Traffic Service KZAKE UNITO CEANIC Traffic Service KZAKE UNITO Celling Floor  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Alfitudes (OROCA)  Example: 12,500 feet International Boundary (Not shown when coincident with ARTCC or FIR)  Area of Enlargement (contain only data for through flights) See Area Charts for complete data Conficial Time Zone  International Date Line  AIRSPACE INFORMATION Open area (white) indicates controlled airspace (Class E) unless otherwise indicat All airspace 14,500' and above is controll (Class E)  Shaded area (brown) indicates uncontrolled airspace below 14,500' (Class G)  In Canada - Indicate Class B Airspace above 12,500'  Oceanic Control Art  |
| LF/MF Airway  LF/MF Airway  AO  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Radial outbound from a VHF/UHF NAVAID  OOO  Radial outbound from a VHF/UHF NAVAID  Magnetic Reference Bearing, outbound from a NAVAID or Fix Compulsory Fixes and/or NAVAIDS  OO  OO  OO  Mileage between other Fixes, NAVAIDS and/or Mileage Bereakdown  EXAMPLE OF  Magnetic Reference Bearings Will not be shown on joint Victor/RNAV routes.  Repo Victor/RNAV routes.  Repo Victor/RNAV routes.  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000' to and including 1 4000' 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  A Fix Compulsory and Non-Compulsory Position Report  Penotes DME Fix (Distance same as route mileage)  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAUD)  Mileage Breakdown or Computer X X Navigational Fix (CNF) (no ATC functions)   | Region (FIR)  Type of Area Traffic Service (Calcarance Allitudes (OROCCA)  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Allitudes (OROCCA)  Example: 12,500 feet International Boundary  Not shown when coincident with ARTCC or FIR)  Area of Enlargement (contained Soundary)  Area of Enlargement (contai |
| LF/MF Airway  AO  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Radial outbound from a VHF/UHF NAVAID  Magnetic Reference Bearing, outbound from a NAVAID or Fix  Total Mileage between Compulsory Fixes and/or NAVAIDS and/or Mileage between other Fixes, NAVAIDS and/or Mileage Breakdown  EXAMPLE OF  Magnetic Reference Bearings will not be shown on joint Victor/RNAV routes.  DUCEY  102  | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Reception Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000' to and including 1 4000' 175K applies to all altitudes  FIXES/ATC REPORTING REQUIREMENTS  Fix Compulsory and Non-Compulsory Position Report  Poenotes DME Fix (Distance same as route mileage)  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAUD)  X Mileage Breakdown or Computer X X Navigational Fix (CNF) (no ATC functions)  | Region (FIR)  Type of Area Traffic Service (Cass E)  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Altitudes (OROCA) Example: 12,500 feet  International Boundary (Not shown when coincident with ARTCC or FIR)  Area of Enlargement (contain only data for through flights) See Area Charts for complete data  Official Time Zone  International Date Line  AIRSPACE INFORMATION Open area (white) indicates controlled airspace (Class E) unless otherwise indicated All airspace 14,500' and above is controlled airspace below 14,500' (Class G)  In Canada - Indicate class B Airspace above 12,500'  Oceanic Control Area (CTA)  Additional Control Area limit  |
| LF/MF Airway  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  VIO  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Facility Locators used in formation of Reporting Points  Adjusted to the control of the control of Reporting Points  Adjusted to the c | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  I MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Crossing Altitude (MRA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000' to and including 14000' 175K applies to all diltudes  FIXES/ATC REPORTING REQUIREMENTS  A Fix Compulsory and Non-Compulsory Position Report  Non-Compulsory Position Report  Poenotes DME Fix (Distance same as route mileage)  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)  Mileage Breakdown or Computer X X Navigational Fix (CNF) (no ATC functions)  GROUPING  Tring Points dinates are n for offshore rolding fixes)  ANA 1 4900  A000 2000G 54 2000G   | Region (FIR)  Type of Area Traffic Service (Cass Parea Charts for complete data only data for through flights)  Air Defense Identification Zone (ADIZ)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Altitudes (OROCA)  Example: 12,500 feel  International Boundary (Not shown when coincident with ARTCC or FIR)  Area of Enlargement (contain only data for through flights)  See Area Charts for complete data official Time Zone  International Date Line  AIRSPACE INFORMATION  Open area (white) indicates controlled airspace (Class E) unless otherwise indicat All airspace 14,500' and above is control (Class E)  In Canada - Indicate (Class B) Airspace above 12,500'  Oceanic Control Art (CTA)  Additional Control Area limit  Class B Class C Mode C Area Airspace  Airspace Airspace See FAR 91.215  SPECIAL USE AIRSPACE  |
| LF/MF Airway  AO  AO  AO  ATS Route  Low Alfitude RNAV Route GNSS required GNSS required Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Radial outbound from a VHF/UHF NAVAID  Magnetic Reference Bearing, outbound from a NAVAID or Fix Total Mileage between Compulsory Fixes and/or NAVAIDS  Mileage between other Fixes, NAVAIDS and/or Mileage Breakdown  EXAMPLE OF  Magnetic Reference Bearings Will not be shown on joint Victor/RNAV routes.  DUCEY  ARCEY MOO'OOO  ARCEY MOO'OOOO  ARCEY MOO'OOOO  ARCEY MOO'OOOO  ARCEY MOO'OOOO  ARCEY MOO'OOOOO  ARCEY MOO'OOOO  ARCEY MOO'OOOO  ARCEY MOO'OOOO  ARCEY MOO'OOOO  ARCEY MOO'OOOOO  ARCEY MOO'OOOOOO  ARCEY MOO'OOOOO  ARCEY MOO'OOOOOO  ARCEY MOO'OOOOO  ARCEY MOO'OOOOO  ARCEY MOO'OOOOO  ARCEY MOO'OOO  ARCEY MOO'OOO  ARCEY MOO'OOO  ARCEY MOO'OOO  ARCEY MOO'OOOOO  ARCEY MOO'OOO  ARCEY MOO'OOO  ARCEY MOO'OOO  ARCEY MOO'OOO  ARCEY MOO'OOO  ARCEY MOO'OOO  ARCEY MOO'OO  A | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  I MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Crossing Altitude (MKA)  Holding Pattern with max restricted airspeed 210K applies to altitudes above 6000° to and including 14000° 175K applies to all altitudes FIXES/ATC REPORTING REQUIREMENTS  A Fix Compulsory and Non-Compulsory Position Report  RNAV Waypoint Compulsory and Non-Compulsory Position Report  Penotes DME Fix (Distance same as route mileage)  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)  Mileage Breakdown or Computer X X Navigational Fix (CNF) (no ATC functions)  Airway Restriction (airway penetrates Prohibited & Restricted Airspace)  MAA-14900  MAA-14900  MAA-14900  A DECEMBER 14  MEA, MOCA and/or MAA individe (MEA)  MEA, MACO Andro And | Region (FIR)  Type of Area Traffic Service KZAAK UNITO CEANIC VIOLENT Traffic Service KZAAK UNITO CEANIC VIOLENT Traffic Service KZAAK UNITO Cone (ADIZ)  Air Defense Identification Zone (ADIZ)  5 Off Route Obstructic Clearance Alfitudes (OROCA) Example: 12,500 feet International Boundary (Not shown when coincident with ARTCC or FIR)  Area of Enlargement (contain only data for intrough flights) See Area Charts for complete data Conficial Time Zone International Date Line AIRSPACE INFORMATION Open area (white) indicates controlled airspace (Class E) unless otherwise indicat All airspace 14,500' and above is controll (Class E)  Shaded area (brown) indicates uncontrolled airspace below 14,500' (Class G)  In Canada - Indicate Class B Airspace above 12,500'  Oceanic Control Area (CTA)  Additional Control Area (Imit)  Class B Class C Mode C Area Airspace Airspace See FAR 91.215  SPECIAL USE AIRSPACE  P - Prohibited Area Restricted Area R-  |
| LF/MF Airway  AO  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Radial outbound from a VHF/UHF NAVAID  Magnetic Reference Bearing, outbound from a NAVAID or Fix Compulsory Fixes and/or NAVAIDS  OO  OO  OO  Total Mileage between Compulsory Fixes and/or NAVAIDS  Mileage between other Fixes, NAVAIDS and/or Mileage Breakdown  EXAMPLE OF  Magnetic Reference Bearings Will not be shown on joint Victor/RNAV routes.  DUCEY  OO  ARCEY NOO*OO.OO  WOO*OO.OO  ARCEY NOO*OO.OO  WOO*OO.OO  ARCEY NOO*OO.OO  WOO*OO.OO  ARCEY NOO*OO.OO  ARCEY NOO*OO  ARCEY | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  I MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Crossing Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to all including 14000' 175K applies to all altitudes FIXES/ATC REPORTING REQUIREMENTS  Fix Compulsory and Non-Compulsory Position Report  Non-Compulsory Position Report  Penotes DME Fix (Distance same as route mileage)  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)  Mileage Breakdown or Computer X X Navigational Fix (CNF) (no ATC functions)  FGROUPING  Tring Points dinates are (airway penetrates Prohibited & Restricted Airspace)  MAA-14000 2000  130  | Region (FIR)  Type of Area Traffic Service (Calling FL 55 ACC Traffic Service (Calling FL 55 ACC)  Air Defense Identification Zone (ADIZ)  Off Route Obstructic Clearance Altitudes (OROCA)  Example: 12,500 feet  International Part of the Soundary (Not shown when coincident with ARTC or FIR)  Area of Enlargement (contain only data for through flights) See Area Charts for complete data  Official Time Zone  International Date Line  AIRSPACE INFORMATION Open area (white) indicates controlled airspace (Class E) unless otherwise indicated (Iclass E) Shaded area (brown) indicates uncontrolled airspace below 14,500' (Class G)  In Canada - Indicate Class B Airspace (Class B Airspace (Class B) Airspace (Class B)  Additional Control Area (CTA)  Additional Control Area (Imit)  Class B Cass C Mode C Area Airspace Airspace See FAR 91.215  SPECIAL USE AIRSPACE  USE AIRSPACE  Oceanic Control Area (Imit)  Additional Control Area (Imit)  Additional Control Area (Imit)  CHAPTON CONTROL Area (Imit)  Additional Control Area (Imit)  Additional Control Area (Imit)  Class B Cass C Alert Area (Imit)  Aden Alert Area (Imit)  CHAPTON CONTROL Area (Imit)  Aden Alert Area (Imit)  CHAPTON CONTROL Area (Imit)  Alert Area (Imit)  Alert Area (Imit)  Alert Area (Imit)  CHAPTON CONTROL Area (Imit)  Alert Area (Imit)  CHAPTON CONTROL Area (Imit)  Alert Area (Imit)  CHAPTON CONTROL Area (Imit)  Alert Area (Imit)  Alert Area (Imit)  Alert Area (Imit)  Alert Area (Imit)  CHAPTON CONTROL Area (Imit)  Alert Area (Imit)  Alert Area (Imit)  Alert Area (Imit)  Alert Area (Imit)  CHAPTON CONTROL Area (Imit)  Alert Area (Imit)  |
| LF/MF Airway  AO  AO  AO  ATS Route  Low Altitude RNAV Route GNSS required  Via/bypassing temporarily shutdown NAVAIDS. See NOTAMs or appropriate publications for specific information.  Unusable Route Segment  Preferred Single Direction of Flight Indicator (Canada only)  OOO.0 IDT OOO  Radial outbound from a VHF/UHF NAVAID  OOO  Radial outbound from a VHF/UHF NAVAID  Magnetic Reference Bearing, outbound from a NAVAID or Fix Compulsory Fixes and/or NAVAIDS  OO  OO  OO  OO  Total Mileage between Compulsory Fixes and/or NAVAIDS  Mileage Between other Fixes, NAVAIDS and/or Mileage Breakdown  EXAMPLE OF  Magnetic Reference Bearings will not be shown on joint Victor/RNAV routes.  DUCEY  ARCEY NOO**OOO.OO** NOO**OOO.OO** NOO**OOO.OO** ARCEY NOO**OOO.OO** NOO**OOO.OO** NAVAIDS  ARCEY NOO**OO.OO** NOO** NOO* | 0000 0000 Minimum Enroute Altitude (MEA) 0000G GNSS RNAV MEA  MAA-00000 Maximum Authorized Altitude (MAA)  I MEA, MOCA and/or MAA Change at other than NAVAIDs  Minimum Crossing Altitude (MRA)  Minimum Crossing Altitude (MCA)  Holding Pattern with max restricted airspeed 210K applies to all including 14000' 175K applies to all altitudes FIXES/ATC REPORTING REQUIREMENTS  Fix Compulsory and Non-Compulsory Position Report  Non-Compulsory Position Report  Penotes DME Fix (Distance same as route mileage)  Offset arrows indicate facility forming a fix (away from VHF/UHF, toward LF/MF NAVAID)  Mileage Breakdown or Computer X X Navigational Fix (CNF) (no ATC functions)  FGROUPING  Tring Points dinates are (airway penetrates Prohibited & Restricted Airspace)  MAA-14000 2000  130  | Region (FIR)  Type of Area Traffic Service KZAKAND OCEANIC Traffic Service KZAKAND OCEANIC Traffic Service KZAKAND OCEANIC Traffic Service KZAKAND OCEANIC Traffic Service Ceiling Floor  Air Defense Identification Zone (ADIZ)  5 Off Route Obstructic Clearance Altitudes (OROCA) Example: 12,500 feet  International Boundary (Not shown when coincident with ARTCC or FIR)  WS/Russia Maritime Boundary  Area of Enlargement (contain only data for through flights) See Area Charts for complete data  Official Time Zone  International Date Line  AIRSPACE INFORMATION Open area (white) indicates controlled airspace (Cass E) unless otherwise indicate All airspace 14,500' and above is controll (Class E)  Shaded area (brown) indicates uncontrolled airspace below 14,500' (Class G)  In Canada - Indicate Class B Airspace above 12,500'  Oceanic Control Area (CTA)  Additional Control Area (Imit)  Class B Class C Mode C Area Airspace Airspace R - Restricted Area A - Alert Area Mirror A - Allert Area Mirror A - Mirror A |